

FILE 'HOME' ENTERED AT 13:16:05 ON 08 NOV 2006

=> file registry

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 13:16:14 ON 08 NOV 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 NOV 2006 HIGHEST RN 912617-52-8

DICTIONARY FILE UPDATES: 7 NOV 2006 HIGHEST RN 912617-52-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

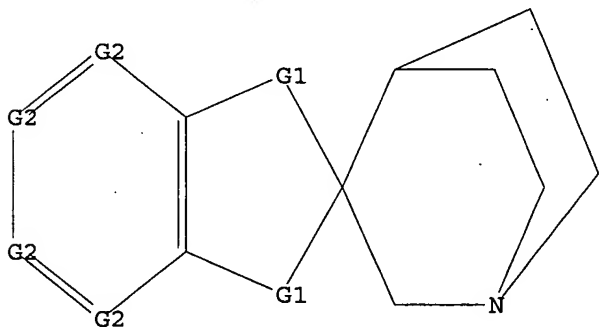
Uploading C:\Program Files\Stnexp\Queries\10525783genericbenzofuran.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,O

G2 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:16:34 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2459 TO ITERATE

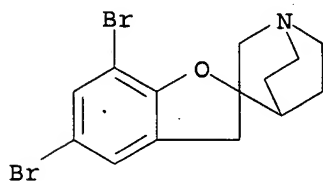
81.3% PROCESSED 2000 ITERATIONS 3 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 46206 TO 52154
PROJECTED ANSWERS: 3 TO 188

L2 3 SEA SSS SAM L1

=> d l2 scan

L2 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-benzofuran], 5',7'-dibromo-
(9CI)
MF C14 H15 Br2 N O
CI COM

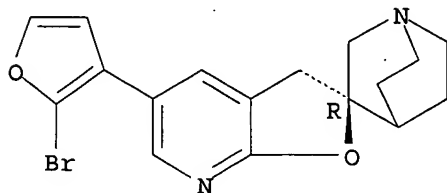


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine],
5'-(2-bromo-3-furanyl)-, (2'R)- (9CI)
MF C17 H17 Br N2 O2

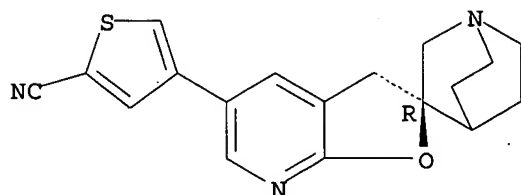
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 2-Thiophenecarbonitrile, 4-(2'R)-spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-
furo[2,3-b]pyridin]-5'-yl- (9CI)
MF C18 H17 N3 O S
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s l1 sss full

FULL SEARCH INITIATED 13:17:14 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 49545 TO ITERATE

100.0% PROCESSED 49545 ITERATIONS

226 ANSWERS

SEARCH TIME: 00.00.01

L3 226 SEA SSS FUL L1

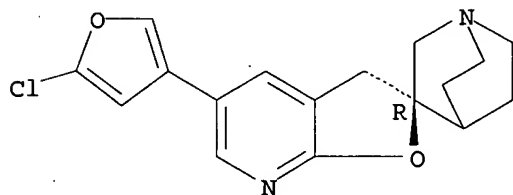
=> d l3 scan

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Spiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridine],
5'-(5-chloro-3-furanyl)-, (2'R)-(9CI)

MF C17 H17 Cl N2 O2

Absolute stereochemistry.



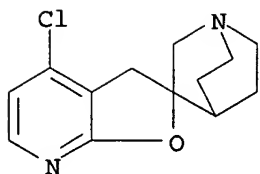
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Spiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridine], 4'-chloro-
(9CI)

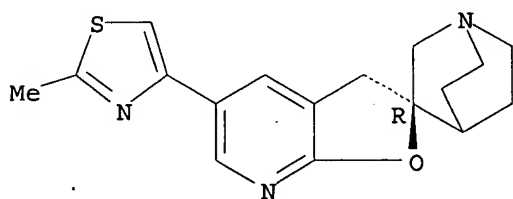
MF C13 H15 Cl N2 O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN Spiro[1-azabicyclo[2.2.2]octane-3,2' (3'H)-furo[2,3-b]pyridine],
 5'-(2-methyl-4-thiazolyl)-, (2'R)-(9CI)
 MF C17 H19 N3 O S

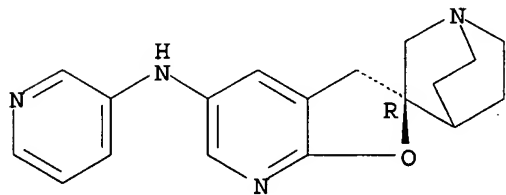
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN Spiro[1-azabicyclo[2.2.2]octane-3,2' (3'H)-furo[2,3-b]pyridine]-5'-amine,
 N-3-pyridinyl-, (2'R)-(9CI)
 MF C18 H20 N4 O

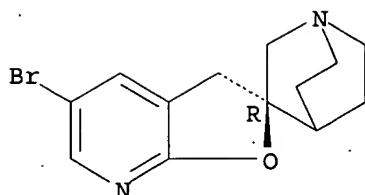
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN Spiro[1-azabicyclo[2.2.2]octane-3,2' (3'H)-furo[2,3-b]pyridine], 5'-bromo-,
 (2'R)-(9CI)
 MF C13 H15 Br N2 O

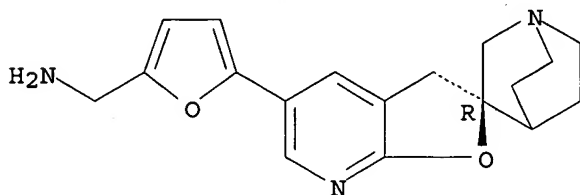
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 226 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN 2-Furanmethanamine, 5-(2'R)-spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-
 furo[2,3-b]pyridin]-5'-yl- (9CI)
 MF C18 H21 N3 O2

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):file caplus
 'FILE CAPLUS' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END".

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

167.82

168.03

FILE 'CAPLUS' ENTERED AT 13:17:45 ON 08 NOV 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 Nov 2006 VOL 145 ISS 20

FILE LAST UPDATED: 7 Nov 2006 (20061107/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s L3

L4 25 L3

=> s 14 and (nicotinic)

37038 NICOTINIC

L5 25 L4 AND (NICOTINIC)

=> s 15 and (alzheim?)

42002 ALZHEIM?

L6 11 L5 AND (ALZHEIM?)

=> d 16 1-11 ti

L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of spirocyclic quinuclidinic ether derivatives as selective modulators of $\alpha 7$ nicotinic acetylcholine receptors

L6 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of spirocyclic quinuclidinic ether derivatives as selective modulators of $\alpha 7$ nicotinic acetylcholine receptors

L6 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI A preparation of spiro(azabicyclooctane-furopyridine) derivatives, useful as ligands for nicotinic acetylcholine receptors

L6 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI A preparation of isotope-labeled spiro(azabicyclooctane-furopyridine) derivatives, useful as ligands for nicotinic acetylcholine receptor

L6 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI $\alpha 7$ - Nicotinic receptor agonists and statins in combination for the treatment of neurodegenerative diseases

L6 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-heterocyclylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

L6 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-thienylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

L6 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-furylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

L6 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane]-3,2'(3'H)-furo[2,3-b]pyridine as a nicotinic acetylcholine receptor ligand

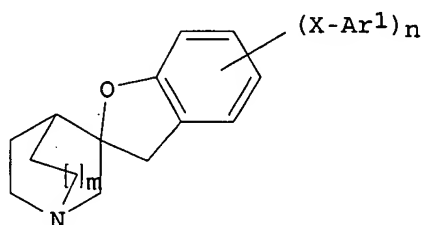
L6 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] as novel ligand for nicotinic acetylcholine receptors

L6 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI Preparation of spiro-quinuclidines as nicotinic acetylcholine
 (ACh) receptor modulators

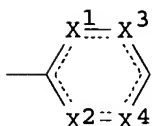
=> d 16 1-11 ti abs bib

L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI Preparation of spirocyclic quinuclidinic ether derivatives as selective
 modulators of $\alpha 7$ nicotinic acetylcholine receptors
 GI

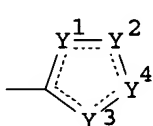


I

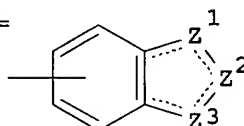
Q=



Q1=



Q2=



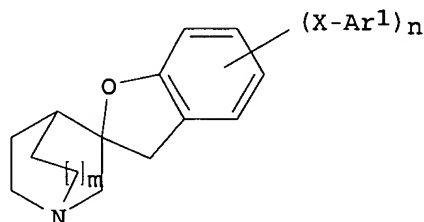
AB Compds. of formula (I) (wherein n, m = 0, 1, or 2; X = a bond, O, S, or NR1; Ar1 = a 5-membered aromatic ring, 6-membered aromatic ring, or a fused bicycloheterocycle represented by Q, Q1, or Q2; X1-X4 = N, CR2; Y1-Y3 = N, O, S, CR2; Y4 = C or N, provided that when Y4 = C, then at least one of Y1-Y3 is other than CR2; Z1-Z3 = N, O, S, CR2; R1 = H, alkyl, alkoxy, carbonyl, alkylsulfonyl, arylsulfonyl; R2 = H, halo, alkyl, alkoxy, alkylcarbonyl, NR3R4; R3, R4 = H, alkyl). The compds. I selectively modulate the effects of $\alpha 7$ nicotinic acetylcholine receptors in a mammal and are useful in treating conditions or disorders prevented by or ameliorated by an $\alpha 7$ nicotinic acetylcholine receptor. The above conditions or disorders include attention deficit disorder, attention deficit hyperactivity disorder (ADHD), Alzheimer's disease (AD), mild cognitive impairment, senile dementia, AIDS dementia, Pick's disease, dementia associated with Lewy bodies, dementia associated with Down's syndrome, amyotrophic lateral sclerosis, Huntington's disease, diminished CNS function associated with traumatic brain injury, acute pain, post-surgical pain, chronic pain, inflammatory pain, neuropathic pain, infertility, need for new blood vessel growth associated with wound healing, need for new blood vessel growth associated with vascularization of skin grafts, lack of circulation, more particularly circulation around a vascular occlusion, a cognitive disorder, neurodegeneration, and schizophrenia. Thus, 5'-bromo-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran] hydrochloride. Thus, a mixture of 5'-bromo-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran] hydrochloride (200 mg), phenylboronic acid (276 mg), Pd2(dba)3 (Strem Chems., 12.4 mg), and 1,3-bis(2,6-diisopropylphenyl)imidazolium chloride, (Strem Chems., 95%, 18.3 mg), Na2CO3 (aqueous 2 M solution, 2 mL), ethanol (8 mL) was stirred at 80° for 15 h to give 45% 5'-phenyl-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran]. The compds. I in vitro showed Ki of .apprx.50 nM to .apprx.100 μ M in an assay of [3H]-cytisine

binding to nicotinic cholinergic receptor in rat brain membrane.

AN 2005:547268 CAPLUS
DN 143:78088
TI Preparation of spirocyclic quinuclidinic ether derivatives as selective modulators of $\alpha 7$ nicotinic acetylcholine receptors
IN Ji, Jianguo; Li, Tao
PA Abbott Laboratories, USA
SO U.S. Pat. Appl. Publ., 22 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

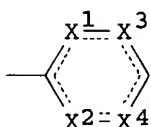
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005137219	A1.	20050623	US 2004-13193	20041215
	US 7045530	B2	20060516		
PRAI	US 2003-532279P	P	20031222		
OS	CASREACT 143:78088; MARPAT 143:78088				
RE.CNT	22	THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD			
		ALL CITATIONS AVAILABLE IN THE RE FORMAT			

L6 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of spirocyclic quinuclidinic ether derivatives as selective modulators of $\alpha 7$ nicotinic acetylcholine receptors
GI

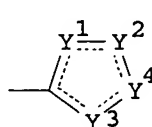


I

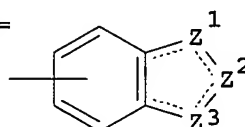
Q=



Q1=



Q2=



AB Compds. of formula (I) (wherein n, m = 0, 1, or 2; X = a bond, O, S, or NR1; Ar1 = a 5-membered aromatic ring, 6-membered aromatic ring, or a fused bicycloheterocycle represented by Q, Q1, or Q2; X1-X4 = N, CR2; Y1-Y3 = N, O, S, CR2; Y4 = C or N, provided that when Y4 = C, then at least one of Y1-Y3 is other than CR2; Z1-Z3 = N, O, S, CR2; R1 = H, alkyl, alkoxy, alkylsulfonyl, arylsulfonyl; R2 = H, halo, alkyl, alkoxy, alkylsulfonyl, NR3R4; R3, R4 = H, alkyl). The compds. I selectively modulate the effects of $\alpha 7$ nicotinic acetylcholine receptors in a mammal and are useful in treating conditions or disorders prevented by or ameliorated by an $\alpha 7$ nicotinic acetylcholine receptor. The above conditions or disorders include attention deficit disorder, attention deficit hyperactivity disorder (ADHD), Alzheimer's disease (AD), mild cognitive impairment, senile dementia, AIDS dementia, Pick's disease, dementia associated with Lewy bodies, dementia associated with Down's syndrome, amyotrophic lateral sclerosis, Huntington's disease, diminished CNS function associated with traumatic brain injury, acute pain, post-surgical pain, chronic pain,

inflammatory pain, neuropathic pain, infertility, need for new blood vessel growth associated with wound healing, need for new blood vessel growth associated with vascularization of skin grafts, lack of circulation, more particularly circulation around a vascular occlusion, a cognitive disorder, neurodegeneration, and schizophrenia. Thus, 5'-bromo-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran] hydrochloride. Thus, a mixture of 5'-bromo-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran] hydrochloride (200 mg), phenylboronic acid (276 mg), Pd2(dba)3 (Strem Chems., 12.4 mg), and 1,3-bis(2,6-diisopropylphenyl)imidazolium chloride, (Strem Chems., 95%, 18.3 mg), Na2CO3 (aqueous 2 M solution, 2 mL), ethanol (8 mL) was stirred at 80° for 15 h to give 45% 5'-phenyl-3'H-spiro[4-azabicyclo[2.2.2]octane-2,2'-[1]benzofuran]. The compds. I in vitro showed Ki of .apprx.50 nM to .apprx.100 µM in an assay of [3H]-cytisine binding to nicotinic cholinergic receptor in rat brain membrane.

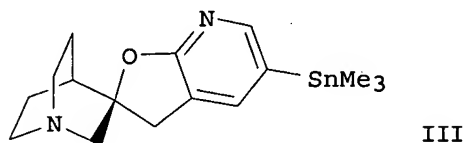
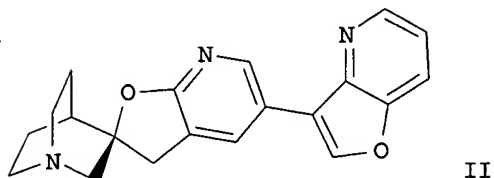
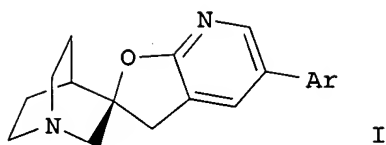
AN 2005:547266 CAPLUS
 DN 143:78087
 TI Preparation of spirocyclic quinuclidinic ether derivatives as selective modulators of α7 nicotinic acetylcholine receptors
 IN Ji, Jianguo; Li, Tao
 PA USA
 SO U.S. Pat. Appl. Publ., 22 pp.
 CODEN: USXXCO

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005137217	A1	20050623	US 2003-744814	20031222
	CA 2549962	AA	20050721	CA 2004-2549962	20041108
	WO 2005066168	A1	20050721	WO 2004-US37142	20041108
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1709042	A1	20061011	EP 2004-810501	20041108
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
PRAI	US 2003-744814	A	20031222		
	WO 2004-US37142	W	20041108		
OS	CASREACT 143:78087; MARPAT 143:78087				

L6 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI A preparation of spiro(azabicyclooctane-fuopyridine) derivatives, useful as ligands for nicotinic acetylcholine receptors
 GI



AB The invention relates to a preparation of spiro(azabicyclooctane-furoaryl) of formula I (Ar is a heteroaryl), useful as ligands for nicotinic acetylcholine receptors. For instance, spiro(azabicyclooctane-furopyridine) derivative II was prepared via coupling of trimethylstannylspiro(azabicyclooctane-furopyridine) derivative III with furo[3,2-b]pyridine-3-triflate. The invention compds. showed binding affinities (K_i) of less than 1000 nM.

AN 2005:409525 CAPLUS

DN 142:463709

TI A preparation of spiro(azabicyclooctane-furopyridine) derivatives, useful as ligands for nicotinic acetylcholine receptors

IN Phillips, Eifion

PA Astrazeneca Ab, Swed.; Astrazeneca Uk Limited

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005042538	A1	20050512	WO 2004-GB4484	20041021
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004285751	A1	20050512	AU 2004-285751	20041021
	CA 2543436	AA	20050512	CA 2004-2543436	20041021
	EP 1678183	A1	20060712	EP 2004-768999	20041021
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
	NO 2006002307	A	20060719	NO 2006-2307	20060522
PRAI	US 2003-512893P	P	20031021		
	WO 2004-GB4484	W	20041021		
OS	MARPAT 142:463709				

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI A preparation of isotope-labeled spiro(azabicyclooctane-fuopyridine)
derivatives, useful as ligands for nicotinic acetylcholine
receptor
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of isotope-labeled
spiro(azabicyclooctane-fuopyridine) derivs. of formula I [wherein: Ar is
6-membered (un)substituted aromatic ring with 0-4 nitrogen atoms in the ring;
R1 is independently at each occurrence H, alkyl, or halogen, provided that
at least one occurrence of R1 comprises tritium or a halogen
radioisotope], useful as ligands for nicotinic acetylcholine
receptor. For instance, deuterium-labeled fluorophenylspiro(azabicyclooct
ane-fuopyridine) derivative II was prepared from
(tribromofluorophenyl)spiro(az
abicyclooctane-fuopyridine) derivative III and deuterium gas in the presence
of palladium. The invention compds. were tested in $\alpha 7$ and $\alpha 4$
nAChR affinity assays and showed binding affinities (K_i) of less than 1000
nM.

AN 2005:300454 CAPLUS

DN 142:373816

TI A preparation of isotope-labeled spiro(azabicyclooctane-fuopyridine)
derivatives, useful as ligands for nicotinic acetylcholine
receptor

IN Dorff, Peter; Gordon, John; Heys, John Richard; Keith, Richard A.;
McCarthy, Dennis J.; Phillips, Eifion; Smith, Mark A.

PA Astrazeneca AB, Swed.; Astrazeneca UK Ltd.

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030778	A1	20050407	WO 2004-GB4116	20040924
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				
	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				
	EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,				
	SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,				
	SN, TD, TG				
	AU 2004276061	A1	20050407	AU 2004-276061	20040924
	CA 2538705	AA	20050407	CA 2004-2538705	20040924
	EP 1668016	A1	20060614	EP 2004-768659	20040924
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
	CN 1856497	A	20061101	CN 2004-80027711	20040924
	NO 2006001819	A	20060626	NO 2006-1819	20060425
PRAI	US 2003-505731P	P	20030925		
	WO 2004-GB4116	W	20040924		
OS	CASREACT 142:373816; MARPAT 142:373816				

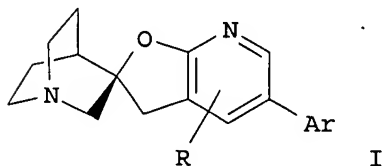
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI α 7- Nicotinic receptor agonists and statins in combination
for the treatment of neurodegenerative diseases
AB The invention discloses combinations of α 7-nAChR agonists and
statins, pharmaceutical compns. containing them, and methods of using them for
the treatment or prophylaxis of neurol. degenerative diseases.
AN 2004:203672 CAPLUS
DN 140:229466
TI α 7- Nicotinic receptor agonists and statins in combination
for the treatment of neurodegenerative diseases
IN Keith, Richard
PA Astrazeneca AB, Swed..
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004019947	A1	20040311	WO 2003-SE1352	20030901
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003256203	A1	20040319	AU 2003-256203	20030901
	EP 1545537	A1	20050629	EP 2003-791540	20030901
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006505530	T2	20060216	JP 2004-532517	20030901
	US 2005256146	A1	20051117	US 2005-525783	20050228
PRAI	SE 2002-2598	A	20020902		
	WO 2003-SE1352	W	20030901		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of (2'R)-5'-heterocyclylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of α 7
nicotinic receptor
GI



AB The title compds. (I) [Ar is either a monocyclic 5-membered ring heterocycle or a bicyclic benzo-fused 5-membered ring heterocycle

connected via the 5-membered ring, having, as part of the five membered ring, one ring nitrogen atom and either one ring oxygen atom or one ring sulfur atom, said monocyclic or fused bicyclic ring heterocycle being substituted with 0, 1, or 2 substituents selected from C1-4 alkyl, C1-4 alkoxy, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, C2-4 alkenyl, C2-4 alkynyl, halogen, CO₂R₁, COR₁, cyano, NO₂, (CH₂)_nNR₁R₂; n = 0-2; R₁ and R₂ are independently selected at each occurrence from hydrogen or C1-4 alkyl; R is a substituent selected from hydrogen, C1-4 alkyl, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, or halogen] or pharmaceutically acceptable salts thereof are prepared as agonists of $\alpha 7$ nicotinic receptor (no data). These compds. I are useful in the treatment or prophylaxis of human diseases or conditions in which activation of $\alpha 7$ nicotinic receptor identify beneficial, i.e. (1) psychotic disorders or intellectual impairment disorders and (2) Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, or mania or manic depression Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is loss of cholinergic synapse, jetlag, cessation of smoking, nicotine addiction including that resulting from exposure to products containing nicotine, craving, pain, and for ulcerative colitis. They are also used in a screen for the discovery of novel medicinal compds. which bind to and modulate the activity, via agonism, partial agonism, or antagonism, of the $\alpha 7$ nicotinic acetylcholine receptor.

AN 2003:837090 CAPLUS

DN 139:350726

TI Preparation of (2'R)-5'-heterocyclylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

IN Chang, Hui-Fang; Phillips, Eifion

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

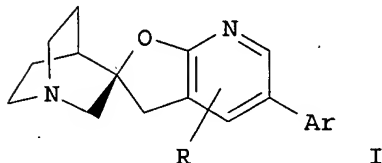
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003087104	A1	20031023	WO 2003-SE615	20030415
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2482313	AA	20031023	CA 2003-2482313	20030415
	AU 2003224546	A1	20031027	AU 2003-224546	20030415
	EP 1499616	A1	20050126	EP 2003-721209	20030415
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003009345	A	20050215	BR 2003-9345	20030415
	US 2005131003	A1	20050616	US 2003-511525	20030415
	CN 1662542	A	20050831	CN 2003-813901	20030415
	JP 2005534624	T2	20051117	JP 2003-584060	20030415
	ZA 2004008338	A	20051102	ZA 2004-8338	20041014
	NO 2004004995	A	20050118	NO 2004-4995	20041117
PRAI	SE 2002-1185	A	20020418		
	SE 2002-3606	A	20021204		
	WO 2003-SE615	W	20030415		
OS	MARPAT 139:350726				

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of (2'R)-5'-thienylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-
furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic
receptor
GI



AB The title compds. (I) [Ar is selected from a 2-, or 3-linked thiophene, benzo[b]thiophene or benzo[c]thiophene substituted with 0, 1, 2 or 3 substituents independently selected at each occurrence from C1-4 alkyl, C1-4 alkoxy, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, C2-4 alkenyl, C2-4 alkynyl, halogen, CO₂R₁, COR₁, cyano, NO₂, (CH₂)_nNR₁R₂; n is 0, 1, or 2; R₁ and R₂ are independently selected at each occurrence from hydrogen or C1-4 alkyl; R is a substituent selected from hydrogen, C1-4 alkyl, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, or halogen] or pharmaceutically acceptable salts thereof are prepared as agonists of $\alpha 7$ nicotinic receptor (no data). These compds. I are useful in the treatment or prophylaxis of human diseases or conditions in which activation of $\alpha 7$ nicotinic receptor identify beneficial, i.e. (1) psychotic disorders or intellectual impairment disorders and (2) Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, or mania or manic depression Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is loss of cholinergic synapse, jetlag, cessation of smoking, nicotine addiction including that resulting from exposure to products containing nicotine, craving, pain, and for ulcerative colitis. They are also used in a screen for the discovery of novel medicinal compds. which bind to and modulate the activity, via agonism, partial agonism, or antagonism, of the $\alpha 7$ nicotinic acetylcholine receptor.

AN 2003:837089 CAPLUS

DN 139:350723

TI Preparation of (2'R)-5'-thienylspiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

IN Chang, Hui-Fang; Li, Yan; Phillips, Eifion

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

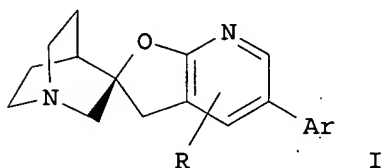
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003087103	A1	20031023	WO 2003-SE614	20030415
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,			

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482312	AA	20031023	CA 2003-2482312	20030415
AU 2003224545	A1	20031027	AU 2003-224545	20030415
EP 1499615	A1	20050126	EP 2003-721208	20030415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009342	A	20050215	BR 2003-9342	20030415
US 2005171106	A1	20050804	US 2003-511522	20030415
CN 1659170	A	20050824	CN 2003-813782	20030415
JP 2005527588	T2	20050915	JP 2003-584059	20030415
ZA 2004008339	A	20051103	ZA 2004-8339	20041014
NO 2004004997	A	20050118	NO 2004-4997	20041117
PRAI SE 2002-1187	A	20020418		
SE 2002-3608	A	20021204		
WO 2003-SE614	W	20030415		
OS MARPAT 139:350723				
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD				
ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L6 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI Preparation of (2'R)-5'-furylspiro[1-azabicyclo[2.2.2]octane-3,2' (3'H)-
 furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic
 receptor
 GI



AB The title compds. (I) [Ar is selected from a 2-, or 3-linked furyl, benzofuryl or isobenzofuryl; substituted with 1, 2 or 3 substituents, or, when a benzofuryl or isobenzofuryl with 0, 1, 2, or 3 substituents, independently selected at each occurrence from C1-4 alkyl, C1-4 alkoxy, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, C2-4 alkenyl, C2-4 alkynyl, halogen, CO₂R₁, COR₁, cyano, NO₂, (CH₂)_nNR₁R₂; n = 0-2; R₁ and R₂ are independently selected at each occurrence from hydrogen or C1-4 alkyl; R is a substituent selected from hydrogen, C1-4 alkyl, C1-4 halogenated alkyl, C1-4 oxygenated alkyl, or halogen] or pharmaceutically acceptable salts thereof are prepared as agonists of $\alpha 7$ nicotinic receptor (no data). These compds. I are useful in the treatment or prophylaxis of human diseases or conditions in which activation of $\alpha 7$ nicotinic receptor identify beneficial, i.e. (1) psychotic disorders or intellectual impairment disorders and (2) Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, or mania or manic depression Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is loss of cholinergic synapse, jetlag, cessation of smoking, nicotine addiction including that resulting from exposure to products containing nicotine, craving, pain, and for ulcerative colitis. They are also used in a screen for the discovery of novel medicinal compds. which bind to and modulate the activity, via agonism, partial agonism, or antagonism, of the $\alpha 7$ nicotinic acetylcholine receptor.

AN 2003:837088 CAPLUS
 DN 139:337962
 TI Preparation of (2'R)-5'-furylspiro[1-azabicyclo[2.2.2]octane-3,2' (3'H)-

furo[2,3-b]pyridine] derivatives as agonists of $\alpha 7$ nicotinic receptor

IN Chang, Hui-Fang; Li, Yan; Phillips, Eifion

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003087102	A1	20031023	WO 2003-SE613	20030415
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2482311	AA	20031023	CA 2003-2482311	20030415
	AU 2003225456	A1	20031027	AU 2003-225456	20030415
	EP 1499618	A1	20050126	EP 2003-746523	20030415
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003009343	A	20050215	BR 2003-9343	20030415
	US 2005176745	A1	20050811	US 2003-511535	20030415
	CN 1662541	A	20050831	CN 2003-813895	20030415
	JP 2005533012	T2	20051104	JP 2003-584058	20030415
	NO 2004004996	A	20050118	NO 2004-4996	20041117
PRAI	SE 2002-1186	A	20020418		
	SE 2002-3607	A	20021204		
	WO 2003-SE613	W	20030415		

OS MARPAT 139:337962

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane]-3,2' (3'H)-furo[2,3-b]pyridine as a nicotinic acetylcholine receptor ligand

AB Title compound (I) was prepared Thus, (2'R)-5'-bromospiro[1-azabicyclo[2.2.2]octane]-3,2' (3'H)-furo[2,3-b]pyridine, 3-furylboronic acid, (PPh₃)₄Pd, and Na₂CO₃ were heated in H₂O/THF/EtOH at 70° for 24h to give I. I showed acetylcholine $\alpha 7$ receptor binding with K_i = 0.033 nM.

AN 2003:58809 CAPLUS

DN 138:106681

TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane]-3,2' (3'H)-furo[2,3-b]pyridine as a nicotinic acetylcholine receptor ligand

IN Eifion, Phillips

PA USA

SO U.S. Pat. Appl. Publ., 5 pp., Cont.-in-part of U.S. Ser. No. 871,773, abandoned.

CODEN: USXXCO

DT Patent

LA English

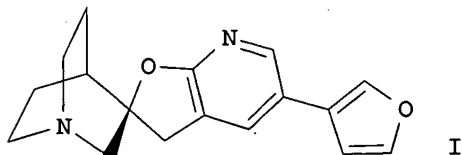
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003018042	A1	20030123	US 2002-159786	20020531

US 6569865 B2 20030527
 PRAI US 2001-367351P P 20010601
 US 2001-871773 B1 20010601

L6 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridine] as novel ligand for nicotinic acetylcholine receptors

GI



AB The title compound I.2HCl, useful in the treatment or prophylaxis of psychotic disorders or intellectual impairment disorders (no biol. data given), was prepared by bromination of (R)-spiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridine] followed by reacting the resulting 5'-bromo derivative with 3-furylboronic acid in the presence of Pd(PPh₃)₄ and Na₂CO₃ in H₂O/EtOH/THF.

AN 2002:927434 CAPLUS

DN 138:14045

TI Preparation of (2'R)-5'-(3-furanyl)spiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridine] as novel ligand for nicotinic acetylcholine receptors

IN Phillips, Eifion

PA Astrazeneca Ab, Swed.

SO PCT Int. Appl., 15 pp.
 CODEN: PIXXD2

DT Patent

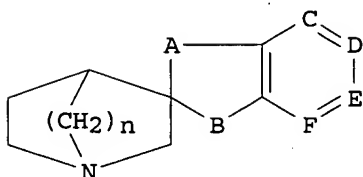
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002096912	A1	20021205	WO 2002-SE1031	20020529	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	CA 2455341	AA	20021205	CA 2002-2455341	20020529	
	EP 1397366	A1	20040317	EP 2002-731063	20020529	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		
	CN 1512995	A	20040714	CN 2002-811049	20020529	
	BR 2002010075	A	20040817	BR 2002-10075	20020529	
	JP 2004532877	T2	20041028	JP 2003-500091	20020529	
	NZ 529426	A	20050729	NZ 2002-529426	20020529	
	ZA 2003008779	A	20050211	ZA 2003-8779	20031111	
PRAI	US 2001-295206P	P	20010601			
	WO 2002-SE1031	W	20020529			

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
 TI Preparation of spiro-quinuclidines as nicotinic acetylcholine
 (ACh) receptor modulators
 GI



I

AB The title compds. [I; A, B = O, S, CH₂, OCH₂, CH₂O; C = N, CR₁; D = N, CR₂; E = N, CR₃; F = N, CR₄; R₁-R₄ = alk(en)yl, alkynyl, (cyclo)alkyl, (cyclo)alkoxy, thioalkoxy, aryloxy, halo, CF₃, cyano, amino, NO₂, 5-6-membered heteroaryl, etc.; n = 1-3] or their pharmaceutically acceptable salts, useful for the treatment of disorders or diseases responsive to the activity of nicotinic ACh receptor modulators, were prepared by ketalization of quinuclidinones with catechols. Thus, spiro[benzo-1,3-dioxolane-2,3'-quinuclidine] (II) (m. 123-125°) was prepared in 3.7% yield by stirring 5.0 g quinuclidinone-HCl with 17.3 g catechol for 15 h at 200° under N. II in vitro inhibited binding of 3H-α-bungarotoxin on rat brain tissue ACh receptors with IC₅₀ of 0.1900 μM.

AN 1998:795021 CAPLUS

DN 130:38371

TI Preparation of spiro-quinuclidines as nicotinic acetylcholine
 (ACh) receptor modulators

IN Peters, Dan; Olsen, Gunnar M.; Nielsen, Simon Feldbaek; Nielsen, Elsebet
 Ostergaard

PA Neurosearch A/s, Den.

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854189	A1	19981203	WO 1998-DK227	19980529
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2289578	AA	19981203	CA 1998-2289578	19980529
ZA 9804637	A	19981221	ZA 1998-4637	19980529
AU 9874263	A1	19981230	AU 1998-74263	19980529
AU 744368	B2	20020221		
EP 984970	A1	20000315	EP 1998-921380	19980529
EP 984970	B1	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI				
NZ 500643	A	20011221	NZ 1998-500643	19980529
JP 2002500652	T2	20020108	JP 1999-500132	19980529
CN 1110499	B	20030604	CN 1998-805414	19980529
AT 254618	E	20031215	AT 1998-921380	19980529
US 6352995	B1	20020305	US 1999-417889	19991014

PRAI DK 1997-626 . A 19970530

WO 1998-DK227 W 19980529

OS MARPAT 130:38371

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

(FILE 'HOME' ENTERED AT 13:16:05 ON 08 NOV 2006)

FILE 'REGISTRY' ENTERED AT 13:16:14 ON 08 NOV 2006

L1 STRUCTURE UPLOADED

L2 3 S L1

L3 226 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 13:17:45 ON 08 NOV 2006

L4 25 S L3

L5 25 S L4 AND (NICOTINIC)

L6 11 S L5 AND (ALZHEIM?)